# MINISTRY OF EDUCATION BUREAU OF EDUCATION, INDIA

PAMPHLET No. 57

# REPORT OF THE COMMITTEE

ON

Medium of Instruction at the University Stage - 1948



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#### LIST OF PUBLICATIONS OF THE BUREAU OF EDUCATION, INDIA

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1	Report on Vocational Education in India (Delhi, the Punjab and the United Provinces) (E. H. L. 34)	1027
*2	Report of the Women's Education Committee on primary education of girls	1937
*3	in India 1936 Report of the Women's Education Committee of Central Advisory Board of	1937
*4	Education to consider curriculum of Girl's Primary Schools in India Report of the Vernacular Education Committee of the Central Advisory Board of Education appointed to consider certain questions connected	
5	with the administration and control of Primary Education.  Report of the First Committee of Central Advisory Board of Education ap-	1937
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2	7 Report of the Central Advisory Board of Education on Post-War Educational Development in India, 1944 (E.C. 13)	1945

<sup>\*</sup>Not published previously, but proposed to be included in future reprints. †Published by the Central Advisory Board of Health.

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28	Volume containing reports of the Committees of the Central Advisory Board of Education (E.C. 14)	1945
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38	Proceedings of the 1st meeting of the All India Council for Technical Education held at New Delhi on the 30th April, 1st and 2nd May, 1946.	1946
39	Statement of Educational Progress in British India (including individual Provinces and Areas) for the years (1942-45)	1947
40	General Educational Tables for British India 1942-43	1947
41	Proceedings of 13th Meeting of the C. A. B. of Education.	1947
42	Report of the Committee of the C. A. B. of Education on S. S. E. C. for Ind	ia
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48	Proceedings of the 2nd meeting of the A. I. C. T. E. held at Bangalore on 29th, 30th May, 1947	1947
49	Directory of Educational, Scientific, Literary, and Cultural Organisa- tions in India	(In press)
50		(In press)
51	14th meeting of the C.A.B. of Education	(Not ublished)
52	Report of the Committee of the C. A. B. of Education on Secondary Education in India	" "

#### Report of the committee on Medium of Instruction at the university stage 1948.

- At the meeting of the All India Education Conference held at New Delhi on 16th, 17th and 18th January, 1948, it was decided to appoint a Committee consisting of Vice-Chancellors of all the Indian Universities and a few specialists to consider the question of Medium of Instruction at the University stage.
- 2. The Committee met in Committee Room 'B', Central Secretariat(North), New Delhi on the 1st and 2nd May, 1948.

- The following members were present:—
  (1) Dr. Tara Chand, M.A., D. Phil. (Oxon), Educational Adviser to the Government of India. (Chairman)
- (2) Dr. N. P. Asthana, M.A., LL.D., C.I.E., Vice-Chancellor, Agra University.
- (3) Mr. Mohammad Ismail Khan, Vice-Chancellor, Aligarh Muslim University.
  - (4) Dr. D. R. Bhattacharyya, Vice-Chancellor, Allahabad University.
- (5) Sir. C. R. Reddy, M.A. (Cantab), Hon. D.Litt (Andhra), Vice-Chancellor, Andhra University.
- (6) Mr. M. Ruthnaswamy, C.I.E., M.A., Bar-at-Law, Vice-Chancellor, Annamalai University.
  - (7) Pandit Govind Malviya, Pro-Vice-Chancellor, Banaras Hindu University.
- (8) Mahamahopadhyaya P. V. Kane, M.A., LL.M., Vice-Chancellor, Bombay University.
- (9) Mr. P. N. Banerjee, M.A., B.L., Bar-at-Law, Vice-Chancellor, Calcutta University.
  - (10) Dr. D. S. Kothari, Head of the Physics Department, Delhi University.
  - (11) Acharya Narendra Deo, D.Litt., Vice-Chancellor, Lucknow University.
- (12) Lt. Col. Pandit K. L. Dubey, B.A., LL.B., Vice Chancelor, Nagpur University.
  - (13) Sir C. P. N. Singh, C.I.E., M.A., Vice-Chancellor, Patna University.
  - (14) Mr. Justice Teja Singh, Vice-Chancellor, East Punjab University.
  - (15) Dr. G. S. Mahajani, Vice-Chancellor, University of Rajputana.
- (16) Mr. Ishwar Dass, M.A., Registrar, University of Saugor (in place of Vice-Chancellor).
- (17) Mr. Parija, O.B.E., M.A. (Cantab), I.E.S., Vice-Chancellor, Utkal University.
- (18) Sir Shanti Swarup Bhatnagar, F.R.S., Director of Scientific Industrial Research, Government of India.
  - (19) Prof. S. K. Chatterjee, M.A., D.Litt (London), University of Calcutta.
- (20) Prof. Humayun Kabir, Joint Educational Adviser to the Government of India.
- Mr. H. S. Verma, (Ministry of Education) acted as the Secretary of the Committee.

The following members were unable to be present owing to illness or other reasons:

- (1) Dewan Bahadur Sir A. Lakshamanswami Mudaliar, M D., L.J., D. Sc., F.R., C.O.G., F.A.C.S., Vice-Chancellor, Madras University.
- (2) Mr. M. Sultan Mohiyuddin, M.A., LL.B., M.Ed., Vice Chancellor Mysore University.
- (3) Dr. Wali Mohammad, M.A., Ph D., Vice Chancellor, Osmania University, Hyderabad (Descart.

- (4) Mr. H. C. Papworth, O.B.E., M.A., Vice-Chancellor, Travancore University.
- (5) Mr. Krishna Kamta Handiqui, Vice-Chancellor, Gaulrati University,
  - (6) Dr. Zakir Husain, M.A., Ph.D., Principal, Jamia Millia Islamia (Delhi).
  - (7) Dr. M. R. Jayakar, Vice-Chancellor, Poona University.

Hon'ble Maulana Abul Kalam Azad, Minister for Education, Government of India, inaugurated the session of the Committee. Explaining the back-ground of the appointment of the Committee, he stated that all Provinces were agreed that the medium of instruction should be the mother tongue in primary and secondary stages. As regards University Education, English had so far been the medium of instruction as well as examination. Whatever be the other disadvantages of this arrangement, it had given India a common medium of thought and expression. But English would now have to give way to an Indian language. If it was agreed that the national language should be the medium of instruction in our Universities, it would be a great unifying factor. It would also provide the necessary medium for inter-Provincial communication. Committee should however remember that there were several languages in India which had developed rich and progressive literatures and were in a position to serve as the media of instruction upto the highest stage of education. He would therefore, stress the need of great care in examining the problem. While he would personally be happy if the national language was selected as the medium, he would ask the Committee not to overlook the great importance of the Provincial and Regional languages. The Committee would have to decide whether one national language or the Provincial or Regional languages were to be the media of instruction in Universities and what should be the place of the national language in the University curriculum.

The Hon'ble Minister for Education went on to say that some of his colleagues were of the opinion that the time for the transition from English to the national language or regional languages should be at least ten years. He however felt that every effort should be made to make this change in five years. It was, however, for the Committee to consider how long the period of transition should be and by what stages English should be replaced by one national or several regional languages. The Committee would also have to determine what place English should have in the University curriculum. There can be no denving the fact that English will always have an honoured place as an international language. He expressed the hope that this Committee of distinguished Educationists would give a lead to the country which would be in the best interest of all concerned.

- 4. The Agenda before the Committee was as follows:—
  - (1) To consider what should be the medium of instruction and examination at the University stage.
  - (2) To consider the place of the national language in Secondary and Higher Education
  - (3) To consider the question of the script.
  - (4) To consider the stages by which English should be replaced by the national language or regional languages as medium of instruction;
  - (5) To consider the place of English as a language in University Education.
  - (6) To consider the steps to be taken for the preparation of text books, scientific terminology and other requisites for implementing the recommendations made.
  - (7) To consider any other matters relevant to the terms of reference.

## 5. Item 1. MEDIUM OF INSTRUCTION AND EXAMINATION AT THE UNIVERSITY STAGE.

The Chairman referred to the views expressed in certain quarters that we should allow English to continue as a medium of instruction and examination at the University stage for the next five years, and that after this period, the regional language should take its place as medium of instruction and examination at this stage. He understood that the proposal to have the National language as the medium of instruction and examination throughout the whole of the Indian Union was likely to arouse opposition from those areas which have a different language. Besides, from the educational point of view, it was desirable that the medium of instruction should be the mother tongue of the pupils. Hindustani, which is almost certain to be selected as the National language, was not, however, the mother tongue of more than about a third of the population of the Indian Union. It seemed, therefore, that it would be necessary to reconcile ourselves to the idea of having the regional languages as the media of instruction and examination at the University stage when English ceases to hold the position. Efforts should, therefore be made to prepare text books in the regional languages, and see that the text books are ready in sufficient number by the academic year 1953. He invited the views of the members on the question.

Representatives of various Universities pointed out what efforts had been made to replace English by the regional language as medium of instruction and examination. The Calcutta University gives choice to candidates for the Inter and the pass degrees of B.A., B.Sc., and B.Com. examinations to answer their papers either in English or in Bengali. The Nagpur University has adopted Hindi, Marathi and Urdu as the media of instruction and examination at the University stage from the academic session, 1949. The Banaras Hindu University gives option to students in the Intermediate classes to answer their question papers either in English or in Hindi. Hindi would be an additional medium of instruction in all subjects except English and Modern Indian Languages (evaluding Hindi) in the I.A., I.Com., I.Sc., B.A., B.Sc., I.M.S., and LL.B. classes with effect from the academic session beginning in July, 1948. From 1950 onward Hindi would be the compulsory medium of instruction for all students whose domicile is the Eastern Punjab, the United Provinces and the Central Provinces, Bihar or Bajputana.

Opinion was unanimous that a time must come when English should be replaced by an Indian language as the medium of instruction at the higher stages of Education. The main difficulties in giving effect to this proposal were:

- (i) lack of suitable text books especially on Scientific subjects,
- (ii) lack of technical terms in the Indian languages,
- (iii) lack of unanimity concerning the use of one Indian language in place of English,
- (iv) the problem of recruitment to the Federal services,
- (v) Inter-provincial Communication.

With regard to (i) it was agreed that with the co-operation of Central and Provincial Governments, Universities and other voluntary literary associations, this difficulty could be overcome and sufficient literature could be produced in a reasonable time. It was necessary to make an immediate start in the direction, even though it may take longer to complete the changeover than is now anticipated. The chairman expressed the opinion that if this work of producing literature could commence during the financial year (1948-49), is should be possible within 3 or 4 years to produce a certain minimum number of books which could be used for teaching scientific and other subjects through the Indian languages. The cost of producing such literature was estimated at Rs. one lakk a year which should be made available by the Central Government.

With regard to (ii), it was suggested by some members that English terminology which has attained international recognition may be allowed to stay on, while others were of opinion that it was possible to evolve uniform terminology for all Indian languages with the co-operation of various groups in India. It was agreed that it was desirable to have technical terms common both to the Southern and Northern languages.

With regard to (iii), in view of the diversities in the country, it was felt that although a common language for the purposes of Federal Government was needed, the Provinces should have their own languages for administrative and educational purposes.

With regard to (iv) it was agreed that the F.P.S.C. should hold its Examinations in the regional languages, but papers could be similar for all the Provinces. Successful candidates on qualifying for appointment would have to pass a test in the Federal language.

With regard to (v) it was agreed that the Universities should introduce the compulsory study of the Federal language to enable students to have a working knowledge of the Federal language. It was not necessary to insist upon the study of its literature.

After the discussion it was resolved that:

- (i) English as the medium of instruction at the University stage should be replaced during the next five years by Indian languages.
- (ii) Universities should within this period adopt the language of the State or Province or Region as the medium of instruction and examination. After the period of 5 years (from 1948) English will cease to be the medium of instruction and examination.
- 6. Item 11—Place of National Language in Secondary and Higher Education.

The Chairman stated that the proposition before the House was whether the National or Federal language should become a compulsory subject of study for secondary and higher education or it should remain an optional subject. The Secondary Education Committee appointed by the Government of India which was attended by almost all Provincial Directors of Public Instruction and certain State representatives and other prominent Educationists, had resolved that:

"The teaching of the Federal language should be started at the end of the Junior Basic stage and should be compulsory throughout the pre-Secondary stage, but may be optional thereafter."

The idea was that every child all over India, should have an opportunity of knowing the Federal language.

Resolved that.

- (i) there should be a compulsory test in the Federal language during the first degree course of the University but its result should not affect the result of the degree examination,
- (ii) there should be facilities for instruction in the Federal language in all Indian Universities for students who wish to take it up as an optional subject.

#### 7. Item III—QUESTION OF SCRIPT

The Chairman explained why this subject was brought on the agenda, when the question of a National or Federal language had not been finally decided by the Indian Parliament. He stated that during the All India Educational Conference held in January, 1948, a suggestion was made that the Roman Script should be adopted for India.

It was proposed that Devanagri with modifications should be the script for the Federal language and the regional script should remain an alternative script for respective regional languages. An amendment was proposed that the Roman script may be an alternative script for the Federal and the regional languages but it was lost.

If was resolved that Devanagri should be the script for the Federal language but for regional languages the script will be the regional script or Devanagri as the region may choose.

8. Items IV and V-Stages for the replacement of English by National Language or Regional Languages.

The importance of English as the key to modern knowledge and its importance as an international language were recognised and it was resolved:

- "that during the transitional period English should remain as a compulsory second language in the higher courses. The knowledge to be acquired need not be of the literature of English, but it should enable students to study literature in their own subjects. The replacement of English as a medium of instruction should be gradual and staggered through transitory period."
- 9. Item VI-PREPARATION OF TEXT-BOOKS-SCIENTIFIC TERMINOLOGY ETC.

If was agreed that immediate theps should be taken by the Government to have standard literature produced in the Federal languages and should assist the production of similar literature in other Indian languages.

As regards Scientific terminology it was resolved:

- (i) that as far as possible the scientific terminology used in the international world should be employed, but where there is no 'international' terminology, words from the Indian languages should be adopted.
- (ii) that the Central Government should set up immediately a Board, representative of philo'ogists, scientists and language experts to work out a dictionary of Scientific terminology for all modern Indian languages. This Board should be a permanent body, and should work in consultation with the Provinces and Universities. The work should be completed within a period of five years. The Central Government may be asked to allot a substantial sum for the purpose so that the work may start immediately.
- (iii) that the Central Government should give a lead to the Provinces in getting text-books in science subjects in Federal language prepared which the Provinces may be able to adopt in their own language.

  Text books on other subjects should be prepared either by the University or Inter-University Board or the Provincial Government; Central Government should help them out of difficulties by financial assistance.
- 10. Item VII-Other Suggestions.

#### If was resolved that:

- (i) the Central Government should examine in all its hearings the question of extraterritorial jurisdiction of the various Universities in order to help in the solution of the language problem of linguistic minorities within a Province or State.
- (ii) Federal Service examinations may be conducted through the language of the region, but candidates who are accepted by Government should be required to pass a test in the Federal language and to take further training in that language.

#### ANNEXURE I

#### Item IV of Agenda

#### Medium of instruction at all stages of education

The report of the Central Advisory Board of Education which has been generally approved by the Central and Provincial Governments recommends the following stages in the educational system of the country.

(i) Basic ∫ (Primary (Junior Basic).
 (Middle (Senior Basic).
 (ii) High (Six year High School.)

(iii) University (Three years degree course).

2. With regard to Primary and Middle stages of education, the medium of instruction and examination at present is the mother-tongue of the pupils or a local language.

The First Committee of the Central Advisory Board of Education appointed to consider the Wardha Education Scheme (1938) recommended categorically that both in the Junior and Senior Basic stages of education the medium of instruction should be the mother-tongue of the pupils. The Committee had also recommended that:

"A common language for India is desirable. This should be Hindustani with both the Urdu and Hindi Scripts. Option should be given to children to choose the script and provision should be made for teaching them in that script. Every teacher should know both scripts, viz., Urdu and Hindi. Some members of the Committee suggest that the adoption of Roman script might prove, a solution to the language difficulty and greatly minimize the work of both scholar and teacher".

Both these recommendations were adopted by the Board at their meeting held in December, 1938. These have since been confirmed by the Board in their report on Post-War Educational Development in India, in January 1944.

- 3. In regard to the High School stage, the Board have recommended (vide Report on Post-War Educational Development) that the medium of instruction in all high schools should be the mother-tongue of the pupils. English being a compulsory second language. The Inter-University Board had also recommended that the medium of instruction in the High School stage should be the mother-tongue. From the information available it appears that it has not so far been possible to adopt mother-tongue or Hindustani as the medium of instruction and examination in all subjects, in High Schools in all the Provinces. Difficulties are being confronted in regard to suitable books in Science and Mathematics, with the result that certain provinces have not yet found it possible to permit these subjects being taught and examined in the mother-tongue.
- 4. In this connection, it may be mentioned that the Government of Bombay had raised in October, 1941 the question of the introduction of Hindustani in all primary and secondary schools, with a view to evolving an All-India language to be used as a medium of instruction at all stages of education. They therefore requested the Government of India to ask the Central Advisory Board of Education to consider (i) whether it would not be desirable to evolve a standard Hindustani language for the whole of India, and (ii) if so, whether the Board would undertake to appoint a central body for the purpose of compiling a standard Dictionary, Vocabulary and Grammar. The Board considered at their meating held in January, 1942 the points raised and agreed that it was desirable to evolve a standard Hindustani, if possible, but at the same time it was pointed out that there is a form of Hindustani in common use ever a large part of Northern India and that the Government of Bombay might find in this the solution of their difficulty.

- 5. In October, 1942 the Examination Committee of the Central Advisory Board of Education have recommended inter alia that as owing to the fact that in the higher stages of education students are not only taught but are also examined through the medium of a foreign language, the strain on the examinees is great, the question whether the examinees should not be given the option of answering question papers in non-language subjects in their mother-tongue merits further consideration. The Government of India referred this recommendation to the Inter-University Board for their opinion, who considered it at their meeting held in December 1943, and passed the following resolution:
  - "While reaffirming the following resolution of the Fourth Conference of Indian Universities it is the opinion of the Inter-University Board that instruction in the High Schools might be given in the mother-tongue but that it is premature to make the mother tongue the medium of instruction in the Degree courses.
  - "Resolved that in the opinion of this Conference the medium of instruction at different stages of education up to and including the degree course should, as far as circumstances permit, be the mother-tongue of the students.
  - But, in view of the present conditions in India, the medium of instruction in the High Schools should ordinarily be the mother-tongue of the pupil, but where owing to the existence of pupils with different mother-tongues in the same school or for other special reasons it is not possible to do so, the medium or instruction should be English or any other modern Indian language.
  - That with a view to attaining this end, the Universities of India are requested to take steps for enriching the literature of the respective Indian languages.
  - That English should be a compulsory subject of study in the High School Courses.
  - That modern Indian languages and Eastern Classical languages should be recognised as optional subjects for study in the High School and Intermediate and B.A. courses, and they should, as far as possible, be taught through the medium of the mother-tongue or of any modern Indian language of an allied nature.
  - That modern Indian languages may be recognised gradually and as far as possible alternatively with English as media of instruction for the Intermediate and Degree Courses excepting for English, and if necessary for Science subjects.
  - 'That instruction and work in all research institutions should be through the medium of English except in such places where it is already being done through any of the modern Indian languages for special reasons'.
- As this resolution passed by the Inter-University Board does not entirely cover their point of reference, the Central Advisory Board of Education decided at their meeting held in Jan. 1944 that in order effectively to attain the objective underlying the recommendations of the Examinations Committee, greater stress should be laid on instruction in higher stages of education being given through the medium of the mother tongue, and that it may often be very useful for instruction to be given in part through the medium of the mother-tongue and in part through the medium of English.

The Inter-University Board considered at their meeting held in December 1944 the opinion expressed by the Central Advisory Board and have merely re-affirmed the following part of the resolution passed at the Fourth Conference of Indian Universities regarding the medium of instruction:

"That modern Indian Languages be recognised gradually and as far as possible alternatively with English as medium of instruction for the Intermediate and Degree courses excepting for English and if necessary for Science subjects."

The Central Advisory Board of Education decided at their meeting held in January, 1945 to request the Inter-University Board to suggest ways and means for attaining the goal. The latter Board made the following suggestions at their meeting held in December 1945 for the achievement of the objective in view:

- (i) The Central and Provincial Governments and States should subsidize the production of books of University standard in the different Indian languages.
- (ii) The Universities should select certain areas and institutions where the medium of instruction should be an Indian language and where special grants should be made for the employment of qualified teachers and the upkeep of such colleges.

(iii) In the case of such languages as are common to more than one University there should be Inter-University and Inter-Government cooperation in the production of suitable text books.

(iv) In order to encourage such institutions as employ the Indian languages as media of instruction, it would be desirable that, other things being equal, the alumni of these institutions shou'd receive special preference in the matter of employment, particularly in the Education Deptt. and such other departments where proficiency in the Indian languages is likely to prove an added qualification.

With this view, the Central Advisory Board of Education expressed their general agreement at their meeting held in January, 1946.

A detailed account as to the action taken by the Universities in this behalf is given in the Annexure to the Memorandum.

The Govt. of India have also been alive to the problem of evolving scientific terminologies for Indian languages with a view to producing scientific literature for school and college use. The report of the Scientific Terminology Committee, which furnishes general guidance as to how scientific terminology is to-be evolved, was adopted by the Board in 1942.

#### APPENDIX TO ANNEXURE I

Statement showing the position regarding the introduction of Modern Indian Languages as media of instruction in Indian Universities

Agra.—The University has not yet introduced Indian languages as the mediaof instruction in the degree classes of its affiliated colleges in all subjects, but has recognised Hindi and Marathi as the media of instruction and answering questions in Sanskrit papers, and Urdu for Persian papers.

Aligarh.—The students have the option to answer in Urdu all question papers except English, Science and Mathematics at the Intermediate Examination. The University has also recently appointed a Committee to consider the question of the introduction of a Modern Indian Language as the Medium of instruction.

Allahabad.—The question of the adoption of Modern Indian Languages as the medium of instruction in the degree classes is under the active consideration of the various University bodies. As a first step, the Academic Council of the University has decided to introduce a compulsory paper in Hindi or Urdu Composition for all students appearing at the B.A., B.Sc., and B.Com. Examinations.

Andhra.—The University has neither introduced, nor is contemplating the introduction of Indian Languages as the media of instruction in the degree slesses.

Annamalai.—Arrangements have been made to publish suitable Text-Books in Tamil so that instruction through Tamil may be started in the Intermediate Classes without much delay. Due to the paucity of Standard Text-Books, the question of the introduction of Tamil as the medium of instruction in degree classes has not yet been taken up.

Benares.—The question of starting instruction in the degree classes in Hindi was discussed in the Senate but no definite resolution was passed. The University has however given the option to students to answer their papers in the Examinations of Admission, I.A., I.Sc., B.A., B.Sc., and B.T. in any language.

Bombay.—The University is not at present contemplating to introduce the Indian languages as the media of instruction in the Degree Classes.

Dacca.—The University has not yet introduced the Indian Languages as the media of instruction in the degree classes.

De!hi.—The University has not yet introduced nor does it contemplate the immediate introduction of Indian Languages as the media of instruction in the degree classes. The Executive Council and the Academic Council have however appointed a Joint Committee to investigate the subject in all its bearings, and to report in due course to the University.

Lucknow.—(Press Report): The University has started teaching in B.A., B.Com., and LL.B., through Urdu and Hindi from July 1946, and the examinations from 1949 onwards will be conducted through these two languages.

Madras.—A provision in the Regulations of the University exists according to which instruction in certain subjects at the Intermediate stage may, if so desired, be given in an Indian Language. Two colleges are reported to have started teaching History and Logic in Tamil to the Junior Intermediate Class.

Mysore.—The University has not introduced the Indian Languages as the media of instruction in the degree-classes, nor does it contemplate doing so.

Nagpur.—On the recommendations of their Medium of Instruction Committee (1946), the Academic Council of the University resolved that from July 1947 all instruction for students joining the Intermediate classes in Art (including Commerce, Science and Agriculture) shall be given in Hindi, Marathi or Urdu, and not in English. Similarly from 1949 all instruction for the first degree courses in Arts, Science and Agriculture shall be given in one or more of these languages according to the respective resources and needs of each college. If any college can arrange for instruction in one of these languages even before July 1947, the University will permit and even encourage it to do so as has been done in the case of College of Commerce at Wardha and Nagpur. A special officer has been appointed by the Provincial Government to direct the preparation of technical terms and text-books in Hindi and Marathi.

Osmania.—The University uses Urdu as medium of instruction for all its courses of study.

Patna.—The University has directed all colleges to make arrangements for the teaching of all non-language subjects through Hindustani and wherever possible through Bengali, from July 1947 in the faculties of Arts, Science, and Commerce upto the Bachelor's Degree standard. Option to answer in English will be available up to 1950.

Punjab.—There is no proposal before the University to adopt Indian languages as the media of instruction in the degree classes.

Travançore.—On the recommendation of the Education Re-organisation Committee appointed by the Government of Travancore the Senate of the University has retained English as the medium of instruction.

Utkal.—The University has not as yet introduced Modern Indian Languages as the media of instruction in the degree classes, nor does it contemplate doing so.

#### ANNEXURE II

# Report of the meeting of the reference board of scientific terminology held at Bangalore on the 31st May, 1947.

At their 7th meeting held in 1942, the Central Advisory Board of Education, in pursuance of a recommendation of the Scientific Terminology Committee, appointed a Board of Reference to deal with all questions regarding the grouping of Indian Languages according to their natural affinities and issues arising in connection with the adoption of scientific as well as technical terms in those languages. The Reference Board was constituted as follows:—

- 1. Sir A. Fazl-ur-Rahman, L.L.D., B.A. (Oxon), (Chairman).
- Dr. Abdul Haq, B. Litt., Ph.D. (Oxon), Secretary, Anjuman-e-Tarraqqi-e-Urdu, Delhi.
- 3 Sir S. S. Bhatnagar, O.B.E., D.Sc., F.Inst.P., F.I,C., Director of Scientific and Industrial Research.
- 4. Prof. Suniti Kumar Chatterjee, M.A., D.Litt., Head of the Deptt. of Comparative Philology, Calcutta University.
- Sir C. V. Raman, M.A., D.Sc., LL.D., F.R.S., N.L., Head of the Deptt. of Physics, Indian Institute of Science, (Bangalore.

The Board could not meet for some time on account of the illness of the Chairman. Later on he died and the Chairman of the Central Advisory Board, on the authority given to him by that Board, appointed Sir A. Lakshmanaswamy Mudaliar, Vice-Chancellor, University of Madras, as Chairman of the Reference Board.

- 2. The Board met at Bangalore on the 31st May, 1947. The following members were present:—
  - 1. Sir Lakshmanaswamy Mudaliar (Chairman).
  - 2. Dr. Abdul Haq.
  - 3. Prof. Suniti Kumar Chatteriee.
  - 4. Sir C. V. Raman.

Sir Jnan Chandra Ghosh, Director, Indian Institute of Science, (Bangalore, was present by invitation.

Sir Shanti Swarup Bhatnagar, Director of Scientific and Industrial Research, New Delhi, was unable to be present.

- Dr. Akhtar Husain, D.Litt. (Paris), Assistant Educational Adviser to the Government of India, acted as Secretary to the Board.
- 3. The Board had before them the Report of the Scientific Terminology Committee as well as the subsequent decisions of the Central Advisory Board of Education on the subject. They noted that the Central Advisory Board had given them discretion in the matter of grouping of Indian Languages etc. The agenda is appended. (Vide Appendix A).
- 4. The Board took note of the fact that certain Universities had already given the option to examinees to answer examination papers in the Indian Languages. This, in view of the absence of adequate and accepted scientific terminology in the language concerned, had created a difficult situation. In the first place, the examiners had no idea of the correct terminology to be used in question papers and various improvised methods of instruction were in vogue. The Board, therefore, considered it urgent to have this problem tackled from a practical point of view, for the benefit of the students as well-as the readers of popular literature. At the same time, they considered it necessary not to place our students and scientists at a greater disadvantage than those in other countries in the matter of making world scientific literature easily available to them and also in making the work of Indian scientists

available to scientists abroad. In this connection, the Board were informed that the bulk of the scientific words used in the major European Languages were, in fact, international in character. Therefore, the Board were of opinion that well-known scientific terms already in use in the Indian languages with specific and unambiguous meanings and forming an integral part of the language should continue to be used, whereas for other scientific words, the international terminology should be incorporated. Such scientific terminology should deal not only with the names of objects met with in the field of science but should also cover scientific processes. This will simplify the problem for the future when new scientific words are bound to be coined in the different parts of the world, including India.

- 5. Looking at the problem again from the practical point of view, the Board considered it important that adequate literature on scientific matters should be made available urgently in the different Indian Languages, as they were of the opinion that any extension of this transitional stage in the use of scientific terminology was very harmful to the students and the progress of science in the country. The Board considered it necessary to translate important "classical" works in the field of science and modern popular books on scientific subjects into the modern Indian Languages, using the International terminology, where the language concerned has no well-established original equivalent. Such work should appropriately be entrusted to paid personnel and the Board recommended that the Government of India should take the initiative in the matter and proceed with the work. This was necessary in view of the fact that languages extended beyond Provincial boundaries and also in view of the need for a uniform practice in using selected International Terminology, where necessary, in all the languages. To supervise and approve such work, the Board made recommendations for the appointment of Regional and Sub-Committees.
  - 6. The formal resolution adopted by the Board is given below:-
- (1) The Board are of opinion that while due note should be taken of such scientific terms as have been used and are well known in the different languages and also have a specific and unambiguous connotation, so far as new terms are concerned, it is desirable to adopt international scientific terminology with such suffixes and prefixes as may be needed by particular languages. It may be that in some languages, there is a greater abundance of well established scientific terms than in others. In these cases such terms may be retained.

The Board are of opinion that immediate steps should be taken to appoint qualified persons, on a paid basis, to undertake the translation of standard scientific publications, including modern popular books on scientific subjects, incorporating international scientific terms, so that they may serve as models for similar publications in the Indian languages. In the selection of personnel for such work, it is necessary to have the assistance of both scientists and linguists and they should be given a directive to follow the general principles laid down above. It is also desirable that a list of international scientific terms should be prepared with the co-operation of scientists and should be forwarded to the various regional committees proposed below. The mere preparation of a glossery of scientific terms will not, in the opinion of the Board be useful to the extent to which publications using the terms would; in the acceleration of the production of scientific literature in the languages concerned. The classical and modern popular books in science to be translated should be selected on the recommendation of eminent scientists in the field. It is desirable that the set of books selected should broadly cover the whole field of each of the major sciences.

- (2) For the purpose stated above, it is suggested that there should be constituted five Regional Committees as follows:—
  - Southern Group: To deal with Tamil, Telugu, Malayalam and Kannada.

- 2. Western Group: To deal with Gujarati and Maharati.
- 3. Eastern Group: To deal with Bengali, Assamese and Origa.
- 4. Central Group: To deal with Urdu, Hindi, Hindustani and Punjabi.
- 5. North Western Group: To deal with Sindhi, Pushto and Kashmiri.

These Regional Committees should be empowered to appoint sub-committees to deal with each of the constituent languages. The areas outside the particular groups which are interested in a language to be dealt with by the Regional Committee for that group may send a representative or representatives to the sub-committee concerned. The Regional Committees should consist of scientists and linguists who are representatives of the universities, provinces and states in the region concerned. Representation should also be given on these committees to the leading learned and literary organisations in the regions. The Chairman of each sub-committee will be a member of the parent regional committee. The sub-committees should proceed to work on the lines laid down by the regional committees and should submit their reports to the regional committees.

- (3) The Board endorses the suggestions made by Mr. B. N. Seal, regarding symbolic systems in Paragraph 4 (vi) and 4 (vii) of his note on page 13 of the Report of the Scientific Terminology Committee, 1941.
- (4) The Board are of opinion that the setting up of Regional Committees and the appointment of personnel for translation work should be referred by the Government of India to this Reference Board for their final decision.
- 7. A letter of dissent received from Dr. Abdul Haq, regarding the above resolution is appended below (Appendix B).
- 1. To consider the grouping of modern Indian Languages in connection with the question of the development of uniform scientific terminology in the country.
- 2. To consider the functions and personnel of the expert sub-committees to be appointed for each group under item 1 above.
- 3. To consider any other matter that may be relevant to the terms of reference to the Central Board of Reference on Scientific Terminology in India.

### APPENDIX B

APPENDIX A-AGENDA

LETTER DATED THE 9TH JUNE, 1947, FROM ANJUMAN-E-TARRAQQI-E-URDU
(HIND), 1, DARYAGANJ, DELHI, TO THE SECRETARY, CENTRAL ADVISORY BOARD
OF EDUCATION, GOVERNMENT OF INDIA, NEW DELHI.

With reference to the draft resolution of the meeting of the Central (Board of Reference on Scientific Terminology, held at Bangalore on the 31st May last, a copy of which has been kindly sent to me, I beg to say that I do not agree with the regional distribution as given in para. 2 of the resolution and I suggest that the fourth and fifth groups of regions should be renamed and redistributed as follows:—

4. Central and North Eastern Group: To deal with Hindi and Hindustani. 5. North-Western Group: To deal with Punjabi, Urdu, Sindhi, Pushto

I beg to say in this connection that by linking together Sindhi, Pushto and Kashmiri the only common factor can be Urdu and nothing else. Urdu is commonly used in Kashmir, both in educational institutions and offices. It is the official language of the N.W.F.P. and is taught in schools and also of Sind, whose proposed University will have Urdu as its medium of instruction. Thus, a regional committee for Punjabi, Urdu, Sindhi, Pushto and Kashmiri will serve the purpose, while a sub-division of this group will create complications and hamper work, besides being uncalled for. If this is not done, I do not understand how languages like Pushto, Sindhi and Kashmiri will be linked up in their common terminology.

I hope you will please put up this note with the resolution for consideration.

A summary of the views of the Provincial Governments, etc., on the Report of the reference Board on Scientific Terminology in India, 1947.

A--PROVINCES.

Assam.—The Provincial Government have no objection to the constitution of the Regional Committees proposed to be set up for the purpose of scientific terminology.

Bombay.—The Government of Bombay agrees with the views of the Reference Board on Scientific Terminology.

East Punjab.—The proposal of the Reference Board is agreed to.

Madras.—The Government agree generally with the recommendation. They have already constituted a Committee for the drawing up of technical and scientific terms in the South Indian languages viz. Tamil, Telugu, Malayalam and Kannada for subjects taught in colleges and have requested that the Committee may be treated as the Regional Committee for the Southern Group, though the same may not be able to undertake translation work.

Orissa.—The Provincial Government agree with the recommendation of the Reference Board. They accept the suggestion of the setting up of Regional Committees for the languages forming the Eastern Group vis. Bengali,

Assamese and Oriya.

United Provinces.—The Provincial Government agree that the conclusions arrived at by the Board of Reference are generally sound, but have stated that it is not correct to say that there is a terminology in use all the world over because there is a large number of words of scientific application which are peculiar to particular language groups e.g. Anglo-Saxon, German, Latin and Slav. They are of the opinion that Hindi, Bengali, Gujarati and Marathi have the same origin and share a mass of common vocabulary in higher forms and this they also share with Tamil, Telugu and Malayalam. The Provincial Government have requested that this fact may be borne in mind at the time the Regional Committees are set up. Special emphasis being borne in mind as to the common Sanskrit origin of this linguistic group.

#### B.—CENTRALLY ADMINISTERED AREAS

Delhi.—The Superintendent of Education, Delhi, who was consulted in the matter agrees in principle to the appointment of the Board of Reference to deal with all issues regarding adoption of scientific and technical terms in the various languages. It has been suggested that in view of the migration of a large number of Sindhis into India and Kashmir having acceded to the Indian Dominion, 5 groups may be retained (for Kashmiri and Sindhi also) with sub-committees appointed to deal with the constituent languages.

Coorg.—The administration agrees with the recommendation made by the Scient fic Terminology Committee. In regard to the constitution of the Regional Committees, the Chief Commissioner has suggested that a Sub-Committee for Kanada may be formed consisting of representatives from Mysore.

Coorg, Dharwar, Bellary and South Kanara.

Ajmer.—The Chief Commissioner Ajmer-Merwara agrees with the resolutions of the Reference Board, but suggests that Sindhi will still be the concern of the Indian Dominion in view of the migration of the Hindu population of Sind to the Provinces of India.

#### SUMMARY

#### UNIVERSITIES

1. Agra.—The University agrees that the constitution of the Regional Committee as proposed by the Reference Board is the best way of dealing with the question of translating Scientific Literature and no provision need be made for Sindhi and Pushto and that the Central Group (No. 4) should deal with Hindi, Hindustani, and Urdu and the North West Group (No. 5) with Purjabi, Urdu and Kashmeri.

- 2. Andhra.—The University is in full agreement with the recommendations of the Reference Board. It is suggested that the words to be coined should be based on Sanskrit roots.
- 3. Aligarh Muslim: The University is in favour of adopting Indian Languages as medium of instruction and has stated that Urdu will be the medium of instruction in that University but Persian and Devnagari scripts will be allowed.
- 4. Annamalai.—The University has no objection to the formation of Regional Committees and sub-committees.
  - 5. Bombay.—A communication is awaited.
  - 6. Calcutta.—The Scheme has the general approval of the University.
- 7. Nagpur.—The using of international terms as an alternative to the technical terms is favoured for the present. Regarding the publication of popular scientific books, it has been suggested that a committee for each language rather than for each region should be appointed.
  - 8. Utkal.—A communication is awaited.
- A SUMMARY OF THE VIEWS SUBMITTED BY CERTAIN INDIVIDUALS AND AUTHORITIES-IN REGARD TO THE MEDIUM OF INSTRUCTION AND SCRIPT
- 1. Mr. Kapuria of Delhi claims that illiteracy can be dispelled in less than a year's time, provided education is imparted to the people in their mother tongues and local scripts. He has devised a script called AZADI SCRIPT, which is stated to be simple, phonetic and easily understandable.
- 2. Mr. Saranathachari from Madras writes that English should be the medium of Education after the school final of the Madras University.
- 3. Mrs. Wilder of the Christian Medical Association, Nagpur, maintains that adaption of the Roman Script would accomplish more for literacy for India's children and adults, than any other scheme.
- 4. Mr. P. C. Roy of Tatanagar has suggested that the replacement of English should be gradual and that the Roman Script would meet with the least opposition from Muslims, Talugus, Punjabis, etc. who are non-Hindi speaking people. He believes this will also settle the Hindi-Hindustani controversy. He gives the example of Turkey and Russia who have adopted the script.
- 5. Rev. Pinto of Banaras Cantt. has pointed out that Hindustani should be the medium of instruction from the beginning and the local (regional) languages should be made second languages, while English should continue as optional language from High School onwards.
- 6. The Principal, Sanskrit College, Parlakimedi (Orissa) has suggested that Sanskrit should be made the first language or compulsory subject in the course of studies in the H.E. School and M.E. School and mother tongue the second language from the 8th class, the lingua franca of India may be made a compulsory third language.
- 7. Dr. D. N. Sharma of Kanpur has emphasised that Devanagari is the best script in view of its phonetic quality and it can also be learnt in a shorter time in comparison with the Roman or Urdu script. He is opposed to two scripts being adoted alternatively.
- 8. Mr. Lalit Kishore Singh of the Banaras Hindu University has criticised the technical terms coined by Acharya Raghuvira of Nagpur University which in his opinion have not much simplified the matter. He suggests that international terms should be utilised for this purpose.
- 9. The Secretary, Romaka-Lipi-Samiti has suggested the introduction of Roman Script in Hindi, if it is to be lingua-franca of India (copies of the article are attached for reference).

#### ANNEXURE III

Item IV. of agenda.—With reference to the item of agenda mentioned above which relates to the medium of instruction at all stages of education, the following pamphlet on "A Roman Alphabet for India" received from the Assistant Secretary, Romaka-Lipi-Samiti (Roman Letters Society), Calcutta, is circulated to members:

"India is One and Indivisible—geographically, historically, culturally." This is the first article in the creed of Indian Nationalism.

It should be the duty of all Indian Nationalists to strengthen this fundamental unity that underlies all our provincial and local diversities.

Differences in Language and Script in the different areas of ludia are to be resolved, as far as possible, recognising at the same time the importance of the local languages.

All Indian languages should have equality of treatment within the Union of India, but we recognise in Hindi (as the most widely-used and most widely-understood language in India) the National Language of India, as the first among equals. The form of Hindi is the one which takes its words of higher culture from Sanskrit, the language which has been the vehicle of Indian civilisation for thirty centuries and more, while retaining all naturalised Perso-Arabic words and keeping the door open for such foreign words as are connected with Islamic religion and philosophy, and also for such other foreign wocables as may be needed for scientific terminology.

Almost equally important is the question of the Script. India presents a Babel of scripts—Davanagari, Gujarati-Kaithi-Mahajani, Gurumukhi, Bengali-Assamese, Oriya, Telegu-Kannada, Grantha, Tamil, Malayalam, besides, within restricted areas, Maithili, Newari, Sarada, Takri and Landa. These are scripts of Indian origin, all mutually related; and, morcover, there is the Perso-Arabic script in its three important modifications, for Urdu, Sindhi and Pushto. Finally, we have the Roman or Latin script, as used for English and other European languages, in which several Indian languages, ancient and modern, are also written and printed, and which is very largely used for scientific purposes in works on Indian linguistics,—Sanskrit, Pali and the various Prakrits. Tamil, Hindustani or Urdu, Santali and a number of aboriginal languages of India in the Roman script are well-known.

We believe that the best way to bring about the unity of India in the matter of the Script will be to adopt a modified and extended Roman Script for all Indian languages.

Our main reasons for advocating the Roman Script are the following: -

- (1) It is the simplest and easiest of all the existing alphabets; since—
  - (a) its letters are very simple in shape, and their forms are never changed or mutilated;
  - (b) there are no ligatures or 'compound letters';
  - (c) there is sufficient variety in the shapes of the letters minimising the chance of confusion;
  - (d) in their script or handwritten form they are easy and quick to write;
  - (e) the letters stand for individual sounds, vocal or consonantal—for single sounds as in the original Latin application of the Roman alphabet: the single letter as a unit in writing does not possess a syllabic value (i.e. a combination of one or more consonant sounds and a vowel sound, as in the Devnagari; and other allied Indian alphabets);

- (f) the simple shapes of the letters enable very small founts to be employed which are perfectly legible and are not harmful to the eye; the breaking and blurring of types in printing are also minimised.
- (2) From a consideration of the above points, it will be seen that the Roman letter will be helpful for our national life, as it—
  - (a) can be easily acquired by both children and adults, who will be able to read and write their mother-tongue in it in much shorter period of time than in any of the other current scripts, as experience has shown;
  - (b) will be economical in both time and expense; not more than 50 type-items will be required to write all the Indian languages, whereas Davanagari, the most widely-used Indian script, has to use some 450;
  - (c) will be of very great help in the spread of literacy in a country which must make haste to render the remaining 85 per cent. of her population literate as quickly as possible; for those who are illiterate, the Roman script will be simpler and easier than any of the existing Indian alphabets.
- (3) The Roman script is in use over the greatest part of the civilised world. Consequently, by adopting the Roman script,
  - (a) we shall immediately be linked with the larger part of the civilised world:
  - (b) the acquisition of a language using the Roman script will be rendered easier;
  - (c) the use of the type-writer, duplicating machine etc. will be much more wide-spread than now;
  - (d) the international 'Morse Code' for the telegraph can be forthwith widely applied for Indian languages.
- (4) The Hindi-Urdu problem which ultimately hinges on the script will be easily solved through the Roman script. A single script acceptable to all can alone bring about the adoption of a singe style in the Hindi language as regards vocabulary.
- 5. Sir C. V. Raman, M.A., D.Sc., LL.D., F.R.S., N.L., Head of the of the Roman script for Indian languages. Sentimental objections can be met when we consider the following points:—
  - (a) Letters are just symbols for sounds—there is, for instance, no inherent merit or sanctity in the Bengali or Devanagari, Tamil of Gurumukhi letter for k. In the Roman alphabet we find a set of very simple symbols of the widest currency which we should adopt. If high antiquity or early connexion with Indian civilisation is to be maintained at all costs, we should go back to the Brahmi script of the 4th-3rd century B.C., the mother of all Indian alphabets.
  - (b) The order or arrangement of the letters in the Indian alphabets is based on a proper study of the production of the sounds of the human speech: e.g. we have the vowels first, and then the consonants—the stops, aspirates and nasals, arranged according to their point of articulation. This arrangement we shall not abandon, but use an enlarged Roman alphabet arranged in the order of the Sanskrit alphabet.

- (c) We are taking a thousand and one inventions of the West. The adoption of the Roman Script will be no more anti-national than the use of the European clock, for instance.
- (d) The Indian (Sanskrit) order of the letters, and Indian names, together with the Roman letters, will give us probably the most perfect alphabet in the present world.
  - An Alternative Suggestion for the use of Indo-Roman Script

#### (VARNA-MALA)

f, q, x, z-e-guli kayekti urdu o bideši šabdo byavahārya. tānā lekhār madhye "capital letter" barjaner prastaāb samarthan-ogya. kintu šironāmā prabhritite ihār prayog calte pāre. bānlāte namunā :—

romaka-lipi-samiti pratisthita kare romān haraf cālābār pakse samitir kartripaksa y'e sab y'ukti dekhiyechen tā akātya. āmār bālyā-kāler swapna saphal have bujhe khub khusî hayechi. bhārater bhavisyat bamsadhar-gan ihār janya romaka lipi-samitir kāche krtajnā thākbe, kintu āmār biswas romak aksarer prayog-bidhi sambandhe ekhano ses kathā balā hay ni. panditerā e-bisaya ār-o cintā kare dekhben āsā kori.

Samitir pratham laksya hawā cāi, bhārat-bāsīr likhañ paddhatite samatā ebam saralatā ana. tār janya abhijña mudrākarer parāmarsa-o nite have, chāpār kāje subidhā o pāripātya abahelār kathā nay, pāli, prākrita, samskrita o bhārater bibhinna bhāsāy romān aksare chāpābār janya tairi taip byavahrita hay. namunā upare dewā halo. seguli chāpār kāje yathesta upayogī cāyhidā haloi 'ye kona pres ci tāip kine ānte pāre. sutarām seguli badlābār y'ukti-sangata kāran dekhī nā. chāpar kāje ci cihnita tāip-i praśasta ebam abasya byavahārya. kintu chāpār kāj chār ā ek bhāsā-bhhāsir madhya hāte lekhā-lekhite bā tāip-rāitinge paricita sabder sange súcak-cihna-gulier kona konatā bād dileo calte pāre. pratham pratham cihnaguli dewā bhāla, tāte parbār subidhā hay.

āmār dvitya, katha, bharter bibhinna prante ek-i s'abder uccaraner bibhinna a āche, sei kuno uccāran-bhangi gulir madhye samanway ānā-o romān lipi pravartaner ektalaksya thākā ucit. pratyek uccārner pārthakya rākhte nānā cihna byavahār karle lekhā-anarthak bhāri hate paré. tā hate dewā ucit nay. romaka-lipi-samitir kārya saphal hok, iha-i āmār nitya kāmanā raila.

#### hindi men namunā :---

romaka-lipi samiti kāyam karke romaka lipike calaneke paksa men samiti ke kartri paksa ne jo kuch yuktiyan dikhai hain we akatya hain. merā bālyakāl kā swapna saphal hogā, yah jānkar bahut khus huyī hun. bhārat ke bhavisyat vasmāja iske liye romaka-lipi-samti ke ābhārī rahenge. lekin merā viśwas yah hai ki romaka lipi ke prayog-bidhi ke bāre men ab bhi antim nirnay nahīn húa hai, pandit log iske bāre men āge aur soc kar dekhe igo, āsīkarti hun.

samiti kā pahlā laksya yah honā cahiyo ki bharat ke rahanewālon kî lekhan sailiyon men samata aur saralata a jaye. isko liye anubhavī mudrakaron kī salāh bhī lenī cahiye. chapane ke kāryon men subhidha aur swacchata avahelan kī cizen nahin hain, pali, prākrit, samskrit aur bharat ke dusrī bhasaon men chapai ke liye bani huyi tāip kā vyavahār hotā hai, namuna upar men diya gaya hai. we chapāi ke kāryon men bahut hī upayogi hai, jarurat hone se jo koī chapakhana is tāip ko kharīd kar lā saktā hai. atah unhen badalne kā koi yukti-purna karan nazar nahī ata hai. chapāī ke kāryon men is cihnit taip hī upayogī aur abasya vyavahar ke layak hain, lekin chāpaī ke kārya ko chorkar ek hī bhasa bhasiyon ke andar hāthon se likhne men yā tāip-rāitim men paricit sabdon ke sāth sucak cihnon ke andar kuch nā kuch chor dene se bhī kārya ho saktā hai. pahle pahal cinhon ko denā hī acchā hai us se par'hne kī subidhā hoti hai.

Méra dusrā yah kahana hai ki blarat ke dusre dusre pranton men ek hi sabda ke uccaranon ke pranaiyon men samanvay läna aur romaka-lipi ke pracalan ki ekata ke taraf dhyan dena cahiye. harek uccaran men antar rākhne se aur bahut tarah ke cihnon kā vyavahar karnese likhna vyārth bhār swarūp ho jata hai, aisa na hone pāwe. romaka-lipi-samiti kā kārya saphal ho, yahī meri nityā kāmanā hai.

jayādevi basāk romaka-lipi-samiti ki ek sadasyā.

(e) There will be no immediate or absolute abandonment of the Indian scripts. There is bound to be at least one generation of bi-litteralism, in the original script and the Indo-Roman, before the people finally declare for the Roman as a matter of convenience. Even then the study of the Indian scripts will remain obligatory for those who specialise in literature and cultural subjects in India, and it will continue to have a place for artistic and decorative purposes, if not for everyday work.

The following Indo-Roman script (Bharata-Romaka Lipi) has been proposed by the Romaka-lipi-Samiti (Roman Letters Society) of Calcutta for Indian languages and the Society recommends its immediate adoption for Hindi in pan-Indian context as the National Language of India. The principles followed in recommending these special letters to denote specific Indian sounds in the Indo-Roman script are the following:—

- (i) No addition is made to 26 letters of the English alphabet.
- (ii) Capital letters are eschewed—an asterisk (\*) being used before proper names and adjectives.
- (iii) Capped and dotted letters are not used; they are not available in all presses, they are easy to break and be blurred, and they are bad for the eye.
- (iv) Five separate and movable signs called indicators which are obtainable in all presses are used after the ordinary Roman letters, to give the required letter by combination. These five sings are (';,.), besides\* to indicate a proper name. (For the Perso-Arabic script as used for Urdu to be properly transliterated, two more signs may be required, namely (+ i\*).

#### THE INDO-ROMAN SCRIPT

(\* bharata-romaka-lipi)

(The letters follow the Sanskrit order).

aāiīuúr: (r:'l) e (é) ai o (ó) au;

an ah: an: (for candra-bindu, or nasalisation of a vowel);

k kh g gh n'; e ch j jh ñ; t th d dh n;

t th d dh n; p ph b bh m; y r l w (v); s' s s h;

l lh; r r h ( the cerebral 'and its aspirate, as in Hindi and Bengali).

For North Indian Aryan languages, one e, o should be enough; for Dravidian languages short and long e é o o' will be necessary. The special letters n, n n' may be all written simple n before their corresponding class stops and aspirates, for convenience.

For Hindi, was to be used in all pure Hindi words, and in words from foreign languages with the w-sound, and after a consonant as well as inter-vocally where so pronounced in Sanskrit; and v is to be used in Sanskrit words in Hindi where it can be pronounced as b (in the Midland and Eastern India) or as w in Western, Northwestern and Southern India), and for words from foreign languages where v is used.

For Bengali, y' may be used for the y where it is pronounced as j; ā is to be used to indicate an a sound (like English a in law), where it is pronounced o through the loss of an i or u in the word. Bengali open e, if thought necessary, may be written as ae: aek-'one'.

For Tamil, the so called palatal r, n sounds can be indicated as r, n, and the voiced retroflex or cerebral fricative as in the word Tamil, is to be denoted by z', e.g. tamix' kaz'u coz'a, paz'am, etc.

The Sindhi recursive sounds are indicated as g', j' d'. d', b'; and Kol or Munda (Santali etc).unexploded stops as (k', c', t', p',).

The Pashto khshin may be denoted by x, and the gzhe by g', The Indo-Roman transliteration of the Pasto consonants will be as follows:—
b, p, t, t', s, ts (dz), c, h, kh:, d, d', z, r, r', z, z, g', s, ś, x, s:, z:, t:, z:, , gh:, f, q, k g, l, m, n, ñ, w, h, y.

For Urdu, the Indo-Roman transliteration will be as follows:-

Yowels—a, ā, i, ì, u, ú, e, ai, o, au; Consonants—b, p, t, t', s', (or s'; or in Arabic th:) j, c, h (or h), kh:, d, d', z, (or z, or, in Arabic, dh:) r, r', z, z', s, s' s: (or s), z: z; or d: to indicate the Arabic pronounciation), t:, z:. (or z', or dh. for the Arabic sound), ,gh:, f, q, k, g l, m, n, (n:- nasalised n)w, h, y. For hamza,? may be used.

To show the application of the Indo-Roman Script to an Indian language, we give in it specimens of Hindi and Bengali :

Hindi.—

\*urdú ke sacce sanket ko chipa kar ni ti-vas uskī jo man-man ni "las kari aur bā jā ri" vyā khyā kī gaī hai, wah itnì sarva-priya aur kā m kī siddha huī ki ā j isokhoj ke yug men : bhì log usı ka guñ -gān karte jā rahe hain:, aur bhúlkar bhī itna soene ka kas't' nahi n: ut'ha te ki kyon kar: kisi las kar ya las' karì bā jūr kì bhāsā rā s't'ra kì s'is't' aur vyā pak bhasa o sakthai. (\*.'rī "candrabali" \*pa nd' e' ki pustak "\*urdú kā rahasy" se.)

Bengali.-

bhojya jinise bhā nd'ar ut'hla bhare, ranna-ghare han:r'i ca'r'eche, tabu bhoj bale nā tāke; ān inay pat parla kata, daka hayeche kata janke, sei hisā bei bhojer mary yada. amra je "ed'ukeś an" śabdat'ābr:tti kāre mane mane khus i thāki, set'a te bhān:rār gharer cehārā āche, kintu bā ire tākiye dekhi—dhú dhú karche an, ina, sī kšar ālor janya un:cu lant han jholano hāyeche iskule kaleje, kintu set'ā y'adi ruddha deyāle bandi ālok hoy, tā-hāle bālbo a'māder adr:s't'a manda. (\*rabindrā nāth \*t'hākur prañīta "s'ikśr' bikiran" probandha theke).

For particulrs, please write to the Romaka-lipi-Samiti (Roman Letters Society) at "Sudharma," 16, Hindusthan Park, Calcutta 29 (President-Prof. Suniti Kumar Chatterji, M.A., D. Lit. (London), F.R.A.S.B., Khaira Professor of Indian Linguistics and Phonetics in the University of Calcutta; Secretary—Prof. Sukumar Sen,M.A.; Ph. D., Lecturer in Comparative Philology, Calcutta University—27 Goabagan, Lane, Calcutta-6, and Asst. Secretary, Sri Phanindranath Seth—29-1A Baldeopara Road, Calcutta-6).

#### ANNEXURE IV

#### Committee on the medium of instruction at the university and secondary stages

Points from the recent press cuttings

- 1. The transition from English to national language should be gradual, five years being the preparatory period.
- 2. In all the larger language areas, the mother-tongue will necessarily become the medium of instruction first in schools and later in colleges while the language which will take the place of English as Lingua franca will be studied as a second language, preferably in colleges. (Editorial, Hindustan Times, 13-3-48).
- 3. Medium of instruction in Technical subjects should not be changed from English to National language because of the non-availability of the advanced text books on technical subjects in National language and also because the Research Publications are in English language. (Tribune. 10-3-48).
- 4. Before introducing Hindi as the medium of instruction, a National Translation Academy with adequate fund and other facilities should be set up to translate standard work in Arts and Sciences (Editorial, Indian News Chronicle. 13-3-48).
- 5. Mr. P. Tandon's suggestion that India's real National language should b. Hindi with the Devangari Script (Indian News Chronicle of 1-1-48).
- 6. All India Education Conference demand that English being the international language should be retained a compulsory subject in the High School and College stages and that mother tongue should be the medium of instruction in High Schools and Hindi in Colleges. (Mail. 8-1-48).
- 7. Sir Mirza Ismail pleads for the retention of English in our schools and colleges though not as a medium of instruction. Neglect of English is damaging to India's interest. Hindustani in either script must be the National language and not Hindi (Hitavada 4-1-48).
- 8. All India Sanskrit Education Conference pleads that Sanskrit should be made a compulsory subject in schools and colleges and should eventually be the National language (Hindustan Times 22-1-48).
- 9. Dr. K. N. Katju writes that the sanskrit is the fittest language to become the *lingua franca* of India because it is the basis for several important languages of the country.
- 10: The Education Minister, East Punjab, announces that Hindi and Gurmukhi should be the media of instruction in the province. (Hindustan Times, 24-3-48).
- 11. The Vice-Chancellor, Calcutta University expresses the opinion that Bengali should be the medium of instruction in Bengal and English should retain its place in the curricula of studies and examinations as a second language. (Hindustan Times, 22-3-48).
- 12. Dr. S. K. Chatterjee holds that sanskritic Hindi has more than any other modern Indian language a claim to be reorganised as the National language of India and suggests that Roman Script be adopted for all Indian languages.

13. If English is adopted as a second language it cannot be studied as a living language. (Times of India, 13-1-48).

EXTRACT FROM THE AMRITA BAZAR PATRIKA OF WEDNESDAY, MARCH 31, 1948.

HINDI TO BE MEDIUM OF INSTRUCTION IN B. H. U.

English to lose importance: Senate and Syndicate decision. (From our Banaras Office)

TUESDAY.—Hindi, like English would be the optional medium of instructions from July next for the students of classes Intermediate in Arts, Science and Commerce, B.A., B.Sc., B.Com., LL.B. and B.T. of the Banaras Hindu University.

This decision was taken at a meeting of the Syndicate and the Senate of the University held on Saturday last under the Presidentship of Dr. Amaranatha Jha, the Vice-Chancellor.

It would be optional for the students of these classes to select their medium of instruction from among Hindi and English. But by July, 1950 English would lose its prominence as medium of instruction so far as the students hailing from the United Provinces, Bihar, C. P., Rajasthan and Eastern Punjab are concerned and for them Hindi would be the only compulsory medium of instruction.

The suggestion of the Faculty of Science having been accepted the students of I.Sc. will have only one paper in English from 1953 and English literature which at present forms one of the subjects would be scratched. Other Indian languages will be taught either through their own medium or will have Hindi and English as optional mediums.

The examinees in Sanskrit will have the option of answering their papers in either Sanskrit or Hindi.

It was also decided to introduce a new subject of Military Science in the B. A. and B. Sc. classes and Military training would be made compulsory for the girl students as well.

#### ANNEXURE V

EXTRACTS FROM THE DRAFT CONSTITUTION OF INDIA RELATING TO THE PROCE-DURE TO BE ADOPTED IN THE USE OF LANGUAGE IN PARLIAMENT AND THE LEGIS-LATURES OF STATES ARE REPRODUCED BELOW FOR THE INFORMATION OF THE MEMBERS:—

#### CHAPTER II—PARLIAMENT

General

#### Procedure Generally

Language to be used in Parliament. 99 (1).—In Parliament business shall be transacted in Hindi or English: Provided that the Chairman of the Council of States or the Speaker of the House of the People, as the case may be, may permit any member who cannot adequately express himself in either language to address the House in his mother tongue.

(2) The Chairman of the Council of States or the Speaker of the House of the People may, whenever he thinks fit, make arrangements for making available in the Council of States or the House of the People, as the case may be, a summary in Hindi or English or the speech delivered by a member in any other language and such summary shall be included in the record of the proceedings of the House in which the speech has been delivered.

# CHAPTER III—THE STATE LEGISLATURE General.

#### Procedure Generally.

Language to be used in the Legislatures of States. 184.—(1) In the Legislature of a State, business shall be transacted in the language or languages generally used in that State or in Hindi or in English.

(2) The Speaker of the Legislative Assembly or the Chairman of the Legislative Council may, whenever he thinks fit, make arrangements for making available in the Assembly or the Council, as the case may be, a summary in any language generally used in the State or in English of the speech delivered by a member in any other language, and such summary shall be included in the record of the proceedings of the House in which the speech has been delivered.

#### ANNEXURE VI

#### Reprinted from "Current Science", November 1947, 16, 327-328.

#### LANGUAGE MEDIUM FOR SCIENTIFIC EDUCATION IN INDIA

PROGRESSIVES in India have long been cogitating over the language medium of Education in this country. It is generally admitted on all sides that primary and popular education is most effectively and rapidly spread through one's mother-tongue, and it is a welcome sign that the provincial and State governments have commenced to implement this sound policy. As a consequence we can confidently expect the literacy and cultural level to rise with the utmost speed.

Some sentimental patriots, however, have raised a loud cry that education, both elementary and higher, must be conducted only in the provincial language. A few of the universities have, in what seems to us an undue hurry, already launched schemes of 'provincialising' all branches of education. To extend this atavistic policy to all levels and all subjects of education would, we strongly feel, be extending it too far, and the move is fraught with the grave danger of putting backward the clock of Indian Science by a few generations. We have tried here to draw the attention of our scientists and statesmen to the more safient and important reasons for the indefensibility of adopting the provincial language for advanced education in science, research and allied subjects.

The linguistic survey of India enumerates 179 languages of which there are 15 major literary languages. All these have had a long history and an ancient origin. But it must be recognised that modern science has far outgrown the limited knowledge and variety of phraseology of our ancient language. In specialised branches of ever-growing scientific knowledge it would be almost impossible to find in Indian languages the right words for explaining natural phenomena. And even if we did coin them, the new terminology would be no less foreign than those to which we are now accustomed in English.

It is frequently argued that the inherent disadvantage of studying science in the vernacular could be overcome by translating the scientific books and papers. The experience of those who have tried it has shown that it is far from easy and practicable. We cite from a recent communication to the press on the subject

by Sir Hari Singh Gour, Vice-Chancellor of the Saugor University.

"Thirty years ago, in 1918, the Nizam's Government established the Osmania University making Urdu the medium of instruction. When the University was started, they had no books in Urdu to help the University and, therefore, they appointed a Translation Committee which, after thirty years, has been able to translate into Urdu about 400 books through which education is imparted in the University. These books, according to this official report, contain 64,000 new words coined for the purpose; the result being that the language they have created in the name of Urdu is a different language consisting of coined words, which have to be studied in the class-rooms and which are as unintelligible to

the public, as is, say, Chinese. The students who read in that University have to memorise these words for passing their examinations, but as these words are not in popular use, they have become a new language to be studied for examination purposes."

We might add that the Osmania University has succeeded in translating into 'Urdu' hardly 400 books in a period during which more than 40,000 volumes and countless number of papers have been published on advances in scientific subjects. Further, if every province had a different language medium in the field of higher scientific education and research, it would be clearly impossible to keep track of current activity in India and abroad, to exchange notes with workers in the field, to avoid duplication or to improve upon the work of others.

The Reference Committee on Scientific Terminology, appointed by the Government of India, seem to feel that a compromise is possible. The Committee has recommended that "well-known scientific terms already in use in the Indian languages with specific and unambiguous meanings and forming an integral part of the language should continue to be used, whereas for other scientific words, the international terminology should be incorporated. Such scientific terminology should deal not only with the names of objects met with in the field of science but should also cover scientific processes. This will simplify the problem for the future when new scientific words are bound to be comed in the different parts of the world, including India". "This", the Committee leers, "does not place our students and scientists at a greater disadvantage than those in other countries in the matter of making world scientific literature easily available to them and also in making the work of the Indian scientists available to scientists abroad.

In their recommendations the Reference Committee have, no dount, eliminated the unnecessary task of coining new scientific terms in the provincial languages, but other disadvantages persist. A graduate of one province cannot go to another Indian University for higher studies unless he masters the language of science of the new University. The difficulty does not end here. A graduate of one province cannot hope to get employment in another province or state merely on account of the language difficulty. The foregoing reasons amply prove that it will be a retrograde policy to introduce the medium of provincial language in teaching higher classes in science.

The introduction of Hindi as the medium of instruction in all the Indian Universities would be a remedy for many of the evils pointed above. But it is not the ideal. For, a student of the B. Sc. (Hons.) will be expected to specialise in a large number of advanced sceintific subjects for which he has to consult a good number of up-to-date scientific books and journals. As pointed out already it would be an impossible task and an utter waste of intellectual labour to try to translate every book or journal of scientific interest. It would be needless to emphasise that one would be in the dark if one has to depend upon translations into Hindi for one's research work.

The study of the advanced scientific subjects in an international language would be the ideal, and English is such a language today. It is the most widely spoken single language in the world. It has all the advantages necessary for an international language which the advocates of Hindi or Hindustani cannot deny. And in a world that is fast growing smaller the need for the International Language in India is at least as imperative as for a National language.

It is often pointed out by the advocates of vernacularisation that most of the advanced countries where English is not the spoken language are having their mother-tongue for the medium of instruction in advanced scientific studies, and that India could follow their example. But these enthusiasts forget the important fact that English has already become the lingua franca of the educated classes in India, and it is less troublesome to continue with English as the

medium of instruction for higher scientific studies than to introduce Hindi which is equally foreign to a large section of the Indian population. Why should the intelligentia of the country waste their precious time in improving a language when they are already in possession of the best international language? It is high time that we got over irrational emotions and had a more rational and scientific outlook on the language problem.

The advantages of teaching scientific subjects in English in universities are far too many to be mentioned here. Suffice it to say that it saves the bother of translating every book of scientific interest; the scientist can be up-to-date in his knowledge since every useful scientific book or article of the world is invariably translated into English by hundreds of world-famous book companies, and a large percentage of scientific journals are published in English for the ready reference of the English-knowing scientist. Besides, typing and printing has already been standardised almost to perfection in the English language. No one can deny that Japan was as enthusiastic about her language as any other nation in the world, yet she published a large number of her scientific contributions in English and other European languages! Language is only a tool in the hands of man, and no one need be unnecessarily sentimental about it. Let us, therefore, adopt the most common language available for promoting the cause of science in India.

Coming to concrete proposals we urge that science be taught, up to the S. S. L. C. standard, in the provincial language with international nomenclature for scientific terms as proposed by the Committee of Scientific Terminology. During this period English could be taught (as Maulana Azad, the Minister for Education, has rightly directed) as a second language. After this preliminary training it is an easy step for the student to take up the study of science in the university entirely in English. This procedure, we are confident obviates the difficulties that face the student who goes through his education either all in English or all in the vernacular. At this crucial moment in the history of our land we call upon all science institutions, conferences, congresses and academies to give serious thought to this all-important question and place their considered opinion before the universities and governments for implementation. We earnestly hope that India will not introduce in a hurry reforms for which she will have to repent at leisure.